AMENDED CLAIMS

[Received by the International Bureau on 15 November 2005 (15.11.05):
Original claims 1- 20 replaced by amended claims 1-22]

1. Use of an agent that selectively modulates cross-linking of biliary glycoprotein polypeptides for the preparation of a pharmaceutical composition for preventing or treatment of a mammal subject afflicted with an inflammatory disease.

2. The use of claim 1, wherein said inflammatory disease is arthritis or multiple sclerosis (MS).

3. The use of claim 2, wherein said inflammatory disease is rheumatoid arthritis (RA).

4. The use of any one of claims 1 to 3, wherein the agent is an antibody.

5. The use of claim 4, wherein the antibody is a monoclonal antibody.

6. The use of any one of claims 1 to 3, wherein the agent comprises a ligand for the biliary glycoprotein polypeptide, wherein the ligand binds at least one biliary glycoprotein polypeptides.

7. The use of claim 6, wherein the ligand is fused to an immunoglobulin molecule or a fragment thereof.

8. The use of claim 6 or 7, wherein the ligand comprises a biliary glycoprotein polypeptide or fragment thereof.

9. The use of any one of claims 6 to 8, wherein said biliary glycoprotein is a human biliary glycoprotein (CEACAM1) or a fragment thereof.

10. The use of claim 9, wherein said fragment is derived from the extracellular domain of CEACAM1.

11. The use of any one of claims 7 to 10, wherein said immunoglobulin is a human immunoglobulin or a fragment thereof.

12. The use of claim 11, wherein said immunoglobulin fragment of the immunoglobulin is the Fc portion of the immunoglobulin.

13. The use of any one of claims 9 to 12, wherein said biliary glycoprotein fragment comprises the amino sequence from position 1 to 228 of SEQ ID NO: 2 (Figure 1) or a fragment thereof and/or the immunoglobulin fragment comprises the hinge-CH2-CH3 region of the Fc portion of the immunoglobulin.

14. The use of any one of claims 1 to 13, wherein the dosage is in the range of 0.1 mg/kg/day to 25 mg/kg/day.

15. The use of any one of claims 1 to 14, wherein the pharmaceutical composition is adapted in a form to be administered intravenously, subcutaneous, intramuscular or by inhalation.

16. A fusion protein comprising a human biliary glycoprotein (CEACAM1) fragment which is derived from the extracellular domain of CEACAM1 and an Fc portion of a human immunoglobulin.

17. The fusion protein of claim 16, wherein said CEACAM1 fragment substantially consists of the amino sequence from position 1 to 228 of SEQ ID NO: 2 (Figure 1) or a fragment thereof.

18. A polynucleotide encoding the fusion protein of claim 16 or 17.

19. A vector comprising the polynucleotide of claim 18.

20. A host cell comprising a polynucleotide of claim 18 or a vector of claim 19.

21. A composition comprising the fusion protein of claim 16 or 17, the polynucleotide of claim 18, the vector of claim 19 or the cell of claim 20, optionally in combination with a pharmaceutically acceptable carrier.

22. A method for preventing or treatment of a mammal subject afflicted with rheumatoid arthritis or multiple sclerosis, comprising the step of administering to a mammal in need thereof a therapeutic effective amount of a fusion protein of a fragment of biliary glycoprotein and a fragment of an immunoglobulin.

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STATEMENT UNDER ARTICLE 19 (1)

In accordance with Article 19 and Rule 46 PCT it is herewith requested to replace original claims 1 to 20 of the above-identified international patent application with the enclosed amended set of claims 1 to 22. The amendments to the claims are as follows:

Claims 1 to 8 correspond to original claims 1 to 8.

Amended claim 9 corresponds to original claim 9 with the amendment that in order to specify the mentioned human biliary glycoprotein the term "(CEACAM1)" has been incorporated; see the application as filed at page 3, lines 25 to 30.

New claim 10 relates to the use of the fusion protein of the present invention, wherein it is indicated that the CEACAM1 fragment of the fusion protein is derived from the extracellular domain of the CEACAM1

protein and thus may comprise the entire extracellular domain of the CEACAM1 protein. New claim 10 is supported by the application as originally filed, for example at page 1, lines 7 to 10, as well as at page 6, lines 9 to 11.

Amended claims 11 to 15 correspond to original claims 10 to 14 with back-references adjusted.

New claim 16 relates to the fusion protein of the present invention and specifies the CEACAM1 portion of the fusion protein according to new claim 10, so that the entire extracellular domain of the CEACAM1 protein is comprised. New claim 16 is supported by the application as originally filed, for example at page 1, lines 7 to 10 as well as at page 6, lines 9 to 11.

Claim 17 corresponds to original claim 15.

Claims 18 to 22 correspond to original claims 16 to 20 with back-references adjusted.